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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/266,936	03/12/1999	PETRI SILENIUS	1562.0110000	6421
26111	7590	01/12/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	26

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/266,936

Applicant(s)

SILENIUS

Examiner

Kevin R Kruer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,7,8,10-16 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,4,7,8,10-16 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 12 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampl Jr. (US 5,893,372 in view of Briskin et al (US 3,608,559) Simon (US 4,303,084), and Durocher (US 4,615,345). Hampl teaches a high opacity cigarette wrapping paper (abstract) wherein the paper comprises cellulosic pulp (col 6, line 17) and 20-40wt% white pigment (col 3, line 45). The paper preferably has a brightness of at least 70% and an opacity of at least 80% (col 3, line 24). The pigment may comprise calcium carbonate (abstract).

Hampl teaches that the paper is made by a slurry (col 6, lines 39+), but does not detail the process by which the paper is made. However, Durocher teaches that the manufacture of cigarette paper is well established. The conventional practice employs traditional well-laid manufacturing steps of fiber, dispersion, dilution, deposition on a foraminous wire, water extraction, pressing, and drying (col 4, lines 3+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the cigarette paper taught in Hampl by the method taught in Durocher because said method is a well-established method of manufacturing cigarette paper.

Hampl does not teach the addition of calcium oxalate to the pulp and/or coating of the paper. However, Briskin teaches that a calcium compound in a cellulosic material can be converted to calcium oxalate by treatment with oxalic acid (abstract). The technique is especially useful in cigarette papers (col 1, lines 20+) because it results in improved ashing (col 4, lines 31+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to convert the calcium carbonate taught in Hampl to calcium oxalate. The motivation for doing so would have been to improve the ashing properties of the paper.

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Hampl also does not teach that the paper should be coated. However, Simon teaches that a polymeric chlorine containing film can be applied to a cigarette paper in order to limit the free burning time of the cigarette (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the paper taught in Hampl with the polymeric chlorine containing film taught in Simon. The motivation for doing so would have been to reduce the free burning time of the cigarette.

2. Claims 1, 4, 7(1,4, 31), 10 (1, 4, 31), 11 (1, 4, 31) 13-16, 31, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampl Jr. (US 5,893,372 in view of Briskin et al (US 3,608,559-herein referred to as "Briskin"), as evidenced by Briskin et al (US 3,556,109- herein referred to as "Briskin'109").

Hampl teaches a high opacity cigarette wrapping paper (abstract) wherein the paper comprises cellulosic pulp (col 6, line 17) and 20-40wt% white pigment (col 3, line 45). The paper preferably has a brightness of at least 70% and an opacity of at least 80% (col 3, line 24). The pigment may comprise calcium carbonate (abstract). NOTE: the examiner takes the position that the calcium carbonate filler meets the limitations of claims 11 and 15.

Hampl does not teach that calcium oxalate may be applied as a pigment to the taught paper. However, Briskin teaches that calcium oxalate may be sprayed onto a cellulose material (col 6, lines 37+). While not as beneficial as incorporating said calcium oxalate into the fibrous material, such application of calcium oxalate to the surface of a fibrous film has limited benefits (col 4, lines 56+). The calcium oxalate is preferably hydrated (col 6, lines 25+). Thus, it would have been obvious to one of ordinary skill in the art to apply calcium oxalate to the surface of the paper taught in Hampl in order to improve the ashing properties of the paper.

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With respect to claims 7, 1,4 16, and 34, Briskin teaches that the ashing properties of the paper depends on the proportion of the calcium oxalate coated thereto. Thus, it would have been obvious to one of ordinary skill in the art to vary the amount of calcium oxalate coated on said paper in order to control the ashing content of the paper.

With respect to claims 12, 31, 32, and 33, Hampl does not teach the addition of calcium oxalate to the pulp and/or coating of the paper. However, Briskin teaches that a calcium compound in a cellulosic material can be converted to calcium oxalate by treatment with oxalic acid (abstract). The technique is especially useful in cigarette papers (col 1, lines 20+) because it results in improved ashing (col 4, lines 31+). Thus, it would have been obvious to one of ordinary skill in the art to convert the calcium carbonate taught in Hampl to calcium oxalate in order to improve the ashing properties of the paper.

With respect to the limitation that "the coated, wood free paper has less combustion residue than a coated, wood free paper containing pigment other than calcium oxalate," applicant's attention is directed to Briskin'109. Briskin'109 teaches that a paper must contain 40 parts by weight calcium oxalate to produce the same amount of ash as a paper containing 30 parts by weight calcium carbonate (see column 3, lines 9+). Thus, a paper containing calcium carbonate would have more combustion residue than a paper containing an equivalent amount of calcium oxalate.

3. Claims 8(1,4,31), are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampl Jr. (US 5,893,372 in view of Briskin et al (US 3,608,559) as evidenced by Briskin'109, as applied to claims 1, 4, 7(1,4, 31), 10 (1, 4, 31), 11 (1, 4, 31), 13-16, 31, 33, and 34 above, and further in view of Rafton (US 1,934,638). Hampl in view of Briskin is relied upon as above, but does not teach the claimed particle size limitations. However, Rafton teaches that papers coated with alkaline fillers are inferior when the

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particle size of the alkaline filler is not homogeneous (col 2, lines 84+). Thus, it would have been obvious to one of ordinary skill in the art to control the particle size of the particles taught in Briskin in order to obtain a superior coated film.

4. Claims 12 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampl Jr. (US 5,893,372 in view of Briskin et al (US 3,608,559) as evidenced by Briskin'109, as applied to claims 1, 4, 7(1,4, 31), 10 (1, 4, 31), 11 (1, 4, 31), 13-16, 31, 33, and 34 above, and further in view of Durocher (US 4,615,345).

Hampl in view of Briskin is relied upon as above. Specifically, Hampl teaches that the paper is made by a slurry (col 6, lines 39+), but does not detail the process by which the paper is made. However, Durocher teaches that the manufacture of cigarette paper is well established. The conventional practice employs traditional well-laid manufacturing steps of fieber, dispersion, dilution, deposition on a foraminous wire, water extraction, pressing, and drying (col 4, lines 3+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the cigarette paper taught in Hampl by the method taught in Durocher because said method is a well established method of manufacturing cigarette paper.

Response to Arguments

Applicant's arguments filed October 23, 2003 have been fully considered but they are not persuasive. Applicant argues that "the rejection discusses combining Hampl with Briskin and Hampl with Simon, but the examiner does not point to any motivation or suggestion to combine all three documents together. Therefore, the Examiner has not satisfied his burden of establishing a prima facie case of obviousness in regards to the combination of the documents." The examiner respectfully disagrees with applicant's interpretation of the examiner's burden for establishing a prima facie case of

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obviousness. To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. The rejection meets each of these criteria. Specifically, one of ordinary skill in the art would have been motivated by Briskin and Simon to form calcium oxalate in and coat the PVC on the paper taught in Hampl in order to improve the ashing properties and reduce the free burning time of the cigarette.

Applicant has amended claim 12 to require papermaking wire and argues Hampl does not teach paper making wires or screens. Durocher has been combined with Hampl to overcome said deficiency.

Applicant further argues that the references do not teach a method of reducing wear of a coated wood free papermaking wire by incorporating calcium oxalate into said coated, wood free paper. However, the combination of references renders the incorporation of calcium oxalate into the wood free paper obvious. A paper comprising calcium oxalate, which is obvious in view of the applied art, will necessarily exhibit the properties of the claimed paper such as the paper's ability to reduce wear of a coated wood free papermaking wire. The reduction in wear of the papermaking wires is a

result of calcium oxalate's properties in comparison to calcium carbonate. There is no evidence in the application that paper's comprising calcium oxalate exhibit an unexpected decrease in the wear of the papermaking wire utilized to make said paper.

According to Applicant, Briskin does not teach or suggest that the paper containing calcium oxalate has less combustion residue than a paper comprising a pigment other than calcium oxalate. However, Briskin'109 teaches that paper comprising calcium oxalate has less combustion residue than paper comprising calcium carbonate. Thus, applicant's arguments are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (571) 272-1510. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (571)-272-1516. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)-272-1700.

K-R K

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Patent Examiner

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